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(54) Title: PHOSPHORUS-CONTAINING CATALYST COMPOSITION AND HYDROFORMYLATION PROCESS USING THE SAME

(57) Abstract: Provided are a catalyst composition comprising a bidentate ligand, a monodentate ligand, and a transition metal catalyst and a process of hydroformylation of olefin compounds, comprising reacting the olefin compound with a gas mixture of hydrogen and carbon monoxide while being stirred at elevated pressures and temperatures in the presence of the catalyst composition to produce an aldehyde. The present catalytic composition demonstrates the high catalytic activity and option control of selectivity to normal aldehyde or iso aldehyde (N/I selectivity) to a desired value.

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